



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/823,015

03/29/2001

Sandip Sarkar

000388

8358

23696 7590 01/07/2009
QUALCOMM INCORPORATED
5775 MOREHOUSE DR.
SAN DIEGO, CA 92121

EXAMINER

LY, ANH VU H

ART UNIT

PAPER NUMBER

2416

NOTIFICATION DATE

DELIVERY MODE

01/07/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

us-docketing@qualcomm.com
kascanla@qualcomm.com
nanm@qualcomm.com

Office Action Summary	Application No. 09/823,015	Applicant(s) SARKAR ET AL.	
	Examiner ANH-VU H. LY	Art Unit 2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5 is/are allowed.
- 6) ☒ Claim(s) 6-13 and 18-21 is/are rejected.
- 7) ☒ Claim(s) 14-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2416

DETAILED ACTION

Response to Amendment

1. This communication is in response to Applicant's amendment filed October 16, 2008.

Claims 1-21 are pending.

Claim Objections

2. Claims 14-17 are objected to because of the following informalities:

With respect to claim 14, in lines 1-2, replace "Processor-readable medium including processor-executable instructions encoded thereon, the instructions, comprising" with --A computer-readable medium encoded with computer executable instructions, comprising--.

With respect to claims 15-17, in line 1, replace "The processor-readable medium" with --The computer-readable medium--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 6-13 and 18-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Razoumov et al (US Patent No. 6,771,700 B1).

Art Unit: 2416

With respect to claim 6, Razoumov discloses that in a wireless communication system (Fig. 1), a method comprising:

determining a first transmission energy setpoint to achieve a first transmission frame error rate in a first transmission (col. 4, lines 31-32, a transmitting station transmits information, contained in frames, with a first energy (E1). Herein, E1 will certainly yield a first transmission frame error rate);

adjusting the transmission energy setpoint on occurrence of a first transmission error (col. 4, lines 36-37, the transmitting station selects a second transmission energy (E2). Herein, E2 is the adjusted first transmission energy setpoint) in the first transmission, wherein the first transmission error is received from a receiver (col. 4, lines 34-35, the receiving station reports the first FER1 and identity of those frames received in error back to the transmitting station);

determining a retransmission energy setpoint to achieve a retransmission frame error rate in a retransmission (col. 4, lines 36-37, the transmitting station selects a second transmission energy (E2). Herein, E2 will certainly yield a retransmission frame error rate); and

adjusting the retransmission energy setpoint on occurrence of a retransmission error in the retransmission (col. 7, line 22, adjusted retransmission energy setpoint E3), wherein the retransmission error is received from the receiver (col. 4, lines 34-35, the receiving station reports the first FER1 and identity of those frames received in error back to the transmitting station).

Art Unit: 2416

With respect to claims 7 and 19, Razoumov discloses adjusting the retransmission energy setpoint as a function of transmission energy setpoint (col. 7, formula 22, energy setpoint E2 is adjusted based on E1 and its frame error rate).

With respect to claims 8 and 20, Razoumov discloses adjusting the retransmission energy setpoint to achieve a desired frame error rate for retransmission (col. 4, formula 2 and col. 7, formula 22 and 23).

With respect to claims 9 and 21, Razoumov discloses adjusting the first transmission energy setpoint to achieve a desired frame error rate for transmission (col. 6, formula 21).

With respect to claim 10, Razoumov discloses that wherein the first transmission frame error rate is greater than the retransmission frame error rate (col. 6, formula 21, herein, according to the formula, $f(E1)$ is always greater than $f(E2)$ for any applied numbers).

With respect to claim 11, Razoumov discloses that first wherein the transmission frame error rate and the retransmission frame error rate result in a desired total frame error rate (col. 4, formula 2).

With respect to claim 12, Razoumov discloses that wherein the first transmission frame error rate and retransmission frame error rate are predetermined values (col. 5, lines 5-7, any method of solving the equation 1 subject to a constraint requires the knowledge of a FER as a

Art Unit: 2416

function of energy. Herein, requiring the knowledge of FER is an indication of a predetermined FER).

With respect to claim 13, Razoumov discloses that wherein the first transmission frame error rate and retransmission frame error rate are dynamic values (col. 4, formula 2. These values are dynamically changed as a function of transmit energies).

Allowable Subject Matter

4. Claims 1-5 are allowed. Claims 14-17 contain the allowable subject matter but objected to for minor informalities.

The following is a statement of reasons for the indication of allowable subject matter: The prior art does not teach or fairly suggest determining a first transmission energy setpoint as a function of the first transmission frame error rate and a first transmission quality, wherein the determination of the first transmission energy setpoint is responsive to an update trigger; and determining a retransmission energy setpoint as a function of the retransmission frame error rate and a retransmission quality, wherein the determination of the retransmission energy setpoint is responsive to the update trigger, as specified in independent claims 1 and 14.

Response to Arguments

5. Applicant's arguments filed October 16, 2008 have been fully considered but they are not persuasive.

Art Unit: 2416

Applicant argues in page 7 that Razoumov does not disclose determining a first transmission energy setpoint to achieve a first transmission frame error rate in a first transmission and adjusting the first transmission energy setpoint on occurrence of a first transmission error in the first transmission and adjusting the retransmission energy setpoint on occurrence of a retransmission error in the retransmission. Razoumov discloses adjustments based on occurrences of errors in a different transmission while Applicant claims adjustments based on occurrences of errors in that transmission. Razoumov's adjustments to the power level for a successive transmission is based upon the outcome of the previous transmission. Examiner respectfully agrees. However, independent claims 6 and 18 do not recite that the adjustments are made during a first transmission. Instead, claims 6 and 18 recite "adjusting the first transmission energy setpoint on occurrence of a first transmission error in the first transmission". Herein, the adjustments can be made after the first transmission.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2416

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANH-VU H. LY whose telephone number is (571)272-3175.

The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Anh-Vu H Ly/
Primary Examiner, Art Unit 2416

<i>Application Number</i> 	Application/Control No.	Applicant(s)/Patent under Reexamination	
	09/823,015	SARKAR ET AL.	
	Examiner	Art Unit	
	ANH-VU H. LY	2416	